MATHEMATICS CURRICULUM

Rationale

Students with different abilities, needs, and interests need to be able to use mathematics in their personal life. Mathematics is used in daily life as well as in the workplace. All students deserve to understand the power of mathematics. Students need to solve problems encountered in daily life and to predict future needs or outcomes. Students with severe disabilities are able to build on the following long-range outcomes through the mathematics curriculum:

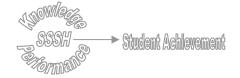
- · Select and use a variety of tools to measure
- Learning concepts and skills in order to apply them to problem solving in and outside school
- Use comparison, sequencing, counting, and classifying to solve problems in daily life and in the work force
- Predict future needs through mathematics
- Follow a routine to participate in daily life
- Participate in daily life through the use of technology
- Learn and use signs, symbols and specialized terms of mathematics in communication

PURPOSE

Mathematics enables students to fulfill personal ambitions and career goals in an ever-changing world. The mathematics curriculum requires participation in learning, connection to other curriculum areas, using technology, and generalization into the community. Students need to know how to apply mathematical skills and knowledge and when to apply them. These priorities focus on the attainment of graduate goals and the Show-Me Standards identified throughout the Mathematics Curriculum.

CONTENT DESCRIPTION BY GRADE LEVEL SPAN

Grade levels are divided into three segments; kindergarten-fifth grade; sixth-eighth grades and ninth-twelfth grades. Grade twelve can last up to four years. The mathematics curriculum is cumulative in that skills learned during the K-5 years are expanded during the 6-8 grades and then the skills are then again expanded upon in the 9-12th grades. It is also nonlinear in that perhaps not every student will master every essential skill identified during the K-5 years, yet s/he could learn a skill identified as a 9-12 skill. The curriculum follows a learning progression *and* we recognize that each student will accomplish the graduate goals by different means (goals mastered).



Show-Me Standard: M-1 Addition, subtraction, multiplication, and division; other number sense, including numeration and estimation and application of these operations

and concepts in the workplace and other situations.

<u>Alternate Framework Standard</u>: FM-1 Counting and grouping strategies used to solve problems encountered in the activities of daily living.

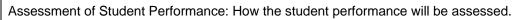
Graduate Goal 4: All graduates will use direct observation or personal experience to solve a problem or complete a task.

Graduate Goal 5: All graduates will follow an object, picture, symbol, or a written routine.

What All Students Should Know	What All Students Should be Able to Do	Learning Activities
By the end of 5th grade, the student will:	By the end of 5th grade, the student will:	TEACH Manual: Volume I, American Flag, Weather, Catch
Use 1 to 1 correspondence.	Goal 1 F-6 Recognize patterns and relationships.	Basket, Apple Fractions Volume II, Balloon Exercise, American
Recognize more and less.	Goal 1 F-4 Participate in activities using	Cowboy, Thanksgiving, Colors Volume III, C-7, C-11, F-10, F-13, K12
Recognize ordinal position first, last.	technological tools to locate, select, and organize information.	Computer Assisted Instruction: Sesame Street Numbers®
	Goal 3 F-2 Apply strategies developed through instruction or observation to solve a problem or complete a task.	Millie's Math House® IntelliPics®
	Goal 3 F-3 Apply strategies developed through personal experience to solve a problem or complete a task.	Assistive Technology: Calculator Touch Window® IntelliKeys® Switch KE:NX®

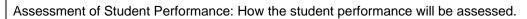


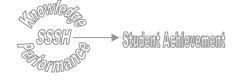
Grades Ma	athematics	and concepts in the workplace Alternate Framework Standard: FM-1 Counting a	timation and application of these operations ce and other situations. and grouping strategies used to solve ntered in the activities of daily living. ervation or personal experience to solve a
What All Students	Should Know	What All Students Should be Able to Do	Learning Activities
By the end of 8 th grade, the Count with 1 to 1 corresponding specific number of items. Demonstrate knowledge by following directions incompletely third, etc.	ondence to get a	By the end of 8 th grade, the student will: Goal 1 F-4 Participate in activities using technological tools to locate, select, and organize information. Goal 3 F-2 Apply strategies developed through instruction or observation so solve a problem or compete a task.	TEACH Manual: Volume I, In My House Volume II, Turkey Soup Math, Collage Math, Turkey Hunt Math Volume III, A-9, D-7, D-80, E-11, F-10, F-13, F-15 Computer Assisted Instruction: Kid Pix Studio® Assistive Technology: Touch Window® IntelliKeys® Switch KE:NX®



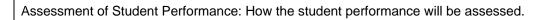


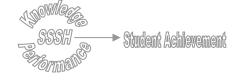
Grades 9-12	Mathematics	operations and concepts <u>Alternate Framework Standard</u> : FM-1 Count	tion and estimation and application of these in the workplace and other situations. ting and grouping strategies used to solve accountered in the activities of daily living. observation or personal experience to solve sk.
What	: All Students Should Know	What All Students Should be Able to Do	Learning Activities
Use one to one vocational, leis	12 th grade, the student will: e correspondence skills for daily living, sure. sitions for daily living, vocational, and	By the end of 12 th grade, the student will: Goal 1 F-4 Participate in activities using technological tools to locate, select, and organize information. Goal 1 F-10 Generalize acquired skills across environments. Goal 3 F-3 Apply strategies developed through personal experience to solve a problem or complete a task.	TEACH Manual: Volume III, B-11, C-7, F-13, H-5, K-6 Computer Assisted Instruction: IntelliPics® Assistive Technology: Calculator Math Safari® Touch Window® IntelliKeys® Joy Stick



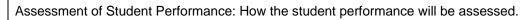


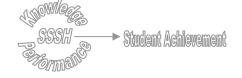
Grades K-5	Mathematics	Alternate Framework Standard: FM-2 Applying b	and similarity and transformations of shapes. basic concepts related to size, shape, and ing measurement skills) to the activities of daily servation or personal experience to solve a
What All	Students Should Know	What All Students Should be Able to Do	Learning Activities
Match by shape. Sort by shape. Match by size. Sort by size. Show comprehe	ension of same/different. etween large and small. riate size item for cooking.	By the end of 5 th grade, the student will: Goal 3 F-2 Apply strategies developed through instruction or observation to solve a problem or complete a task. Goal 3 F-6 Participate in activities that provide opportunities for solving problems by developing solutions based on differing perspectives. Goal 3 F-7 Select an appropriate strategy to address a problem or compete a task. Goal 3 F-8 Make connections between an action and the consequences.	TEACH Manual: Volume I, Fall, Make a Thermometer, In My House, Candy Math Volume II, Pumpkin Pizzazz, American Flag Volume III, A-9, D-19, K-3, K-12 Computer Assisted Instruction: Circus Times Tales® Millie's Math House® Bailey's Book House® Assistive Technology: Touch Window® IntelliKeys® Switch KE:NX®





Grades Mathematics 6-8	Alternate Framework Standard: FM-2 Applying	basic concepts related to size, shape, and ing measurement skills) to the activities of daily servation or personal experience to solve a
What All Students Should Know	What All Students Should be Able to Do	Learning Activities
By the end of 8 th grade, the student will: Demonstrate discrimination of size. Match measurement tool needed for amount needed in recipe. Discriminate between similar and dissimilar items.	By the end of 8 th grade, the student will: Goal 1 F-6 Ask questions to gain information or explore ideas. Goal 3 F-3 Apply strategies developed through personal experience to solve a problem or complete a task.	TEACH Manual: Volume I, When is it done?, Apple Fractions, In MY House Volume II, Collage Math, Turkey Hunt Math, Pumpkin Sort, Funny Face Match Up, Pumpkin Patch Visit Volume III, C-11, E-3 Computer Assisted Instruction: Claris Works® Millie's Math House® Think'n Things II® Assistive Technology: Touch Window® IntelliKeys® Switch KE:NX®





Grades 9-12	Mathematics	Alternate Framework Standard: FM-2 Applying b	and similarity and transformations of shapes. pasic concepts related to size, shape, and ng measurement skills) to the activities of daily ervation or personal experience to solve a
What All	Students Should Know	What All Students Should be Able to Do	Learning Activities
Sequence by s vocational, con Sequence by s vocational, con Use concepts r daily living, voc	ne 12 th grade, the student will: ize to perform daily living, nmunity, & leisure tasks. hape to perform daily living, nmunity, & leisure tasks. related to amounts to perform rational, & community tasks. correct measurement tool to k.	By the end of the 12 th grade, the student will: Goal 1 F-8 Participate in activities involving organizing information into useful forms. Goal 1 F-10 Generalize acquired skills across environments. Goal 3 F-7 Select an appropriate strategy to address a problem or complete a task. Goal 3 F-8 Make connections between an action and its consequences. Goal 4 F-1 Indicate a decision (choice) when given two or more options.	TEACH Manual: Volume I, Dress It Up Volume III, B-5, B-14, D-19, H-9 Computer Assisted Instruction: Think'n Things II® Kid Pix Studio® Assistive Technology: Touch Window® IntelliKeys® Switch KE:NX®



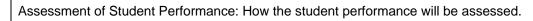
Grades Mather K-5	Graduate Goal 3: All graduates we needs.	FM-3 Gathering and using quantitative information to predict future need or outcomes. ill express personal feelings and self-advocate for immediate ill use direct observation or personal experience to solve a uplete a task.
What All Students Shou	d Know What All Students Should be	Able to Do Learning Activities
By the end of 5 th grade, the studentify items needed to complete Recognize beginning and end.		volume I, Winter, Fall Volume II, Turkey Hunt, Collage Math, Turkey Soup, Count Your Cows, Corral Your Cows Volume III, F-13 Computer Assisted Instruction: Millie's Math House® Bailey's Book House®



Grades Mathematics 6-8	Show-Me Standard: M3 Data analysis, probability, Alternate Framework Standard: FM-3 Gathering a future need or out Graduate Goal 3: All graduates will express person needs. Graduate Goal 4: All graduates will use direct observablem or complete a task.	and using quantitative information to predict stcomes. nal feelings and self-advocate for immediate
What All Students Should Know	What All Students Should be Able to Do	Learning Activities
By the end of 8 th grade, the student will: Recognize basic periods of time. Understand concept of next.	By the end of 8 th grade, the student will: Goal 1 F-6 Recognize and interpret and make use of patterns and relationships in daily living. Goal 3 F-3 Apply strategies developed through personal experience to solve a problem or complete a task. Goal 3 F-8 Make connections between an action and its consequences.	TEACH Manual: Volume II, What Did Cowboys Eat?, American Cowboy, Thanksgiving Volume III, C-9, F-13 Computer Assisted Instruction: Think'n Things® Millie's Math House® Assistive Technology: Touch Window® IntelliKeys® Switch KE:NX®



Grades 9-12	Mathematics	Show-Me Standard: M3 Data analysis, probability, and Alternate Framework Standard: FM-3 Gathering and future need or outco Graduate Goal 3: All graduates will express personal needs. Graduate Goal 4: All graduates will use direct observation problem or complete a task.	using quantitative information to predict mes. feelings and self-advocate for immediate
What All	Students Should Know	What All Students Should be Able to Do	Learning Activities
•	2 th grade, the student will: larly occurring periods of time.	By the end of 12 th grade, the student will: Goal 1 F-6 Recognize and interpret and make use of patterns and relationships in daily living. Goal 3 F-8 Make connections between an action and its consequences.	TEACH Manual: Volume I, When Is It Done?, Clothing Sort Volume III, F-13, K-6 Computer Assisted Instruction: Think'n Things II® Assistive Technology: Math Safari® Touch Window® IntelliKeys® Switch KE:NX®





Grades K-5	Mathematics	Show-Me Standard: M4 Patterns and relationship geometric, and trigonometric Alternate Framework Standard: FM-4 Recognizi using visual mode using visual mode of the standard	ng shapes and patterns in the environment dels. nal feelings and self-advocate for immediate ervation or personal experience to solve a
What A	All Students Should Know	What All Students Should be Able to Do	Learning Activities
Identify safety Identify unive Follow a patte Follow a 4 ste	_	By the end of 5 th grade, the student will: Goal 1 F-5 Attend and/or respond to written visual, and oral presentations and works. Goal 1 F-6 Recognize and interpret and make use of patterns and relationships in daily living. Goal 1 F-8 Participate in activities involving organizing information into useful forms.	TEACH Manual: Volume I, Seasons Kabob, Leaf Lotto, Colored Ice, Gift Bags, Winter Volume II, What Did Cowboys Eat Volume III, D-19, E-7,F-13, I-5 Computer Assisted Instruction: Millie's Math House® IntelliPics® Kid Pix Studio® Assistive Technology: Touch Window® IntelliKeys® Switch KE:NX®



Grades Mathen 6-8	Alternate Framework Standard: FM-4 using Graduate Goal 3: All graduates will exp needs. Graduate Goal 4: All graduates will use problem or complete	elationships within and among functions and algebraic, gonometric concepts. Recognizing shapes and patterns in the environment visual models. ress personal feelings and self-advocate for immediate direct observation or personal experience to solve a a task. by an object, picture, symbol, or a written routine.
What All Students Shou	Ild Know What All Students Should be Able	to Do Learning Activities
By the end of 8th grade, the stu- Follow patterns to perform a va Follow an established schedule	riety of tasks. Goal 1 F-6 Recognize and interpret and of patterns and relationships in daily livin	volume III, A-4, A-11, F-13, F-38, G-5, K-14 Computer Assisted Instruction: Kix Pix Studio®



Grades 9-12	Mathematics	Alternate Framework Standard: FM-4 Recognizing shapes and patterns in the environment using visual models. Graduate Goal 3: All graduates will express personal feelings and self-advocate for immediat needs. Graduate Goal 4: All graduates will use direct observation or personal experience to solve a problem or complete a task. Graduate Goal 5: All graduates will follow an object, picture, symbol, or a written routine.	
What All S	tudents Should Know	What All Students Should be Able to Do	Learning Activities
Recognize and for safety and access Adhere to visual of living, work and le	ollow universal signs for sing the community. directions to complete daily eisure activities. lished daily routine.	By the end of 12th grade, the student will: Goal 1 F-8 Participate in activities involving organizing information into useful forms. Goal 3 F-8 Make connections between an action and its consequences. Goal 4 F-7 Identify and apply practices that preserve and enhance the safety and health of self and others.	TEACH Manual: Volume I, Newspaper Delivery Volume II, Sign Lotto, Time For Safety, Food Item Bingo Volume III, C-3 Computer Assisted Instruction: Press Writer® Assistive Technology: Touch Window® IntelliKeys® Switch KE:NX®



Grades K-5	Mathematics	 Show-Me Standard: M5 Mathematical systems (including real numbers, whole numbers, integers, fractions) geometry, and number theory (including primes, factors, multiples). Alternate Framework Standard: FM-5 Using the relationships between whole numbers, fractions, and shapes to understand real-life concepts. Graduate Goal 3: All graduates will express personal feelings and self-advocate for immediate needs. Graduate Goal 4: All graduates will use direct observation or personal experience to solve a problem or complete a task. Graduate Goal 5: All graduates will follow an object, picture, symbol, or a written routine. 	
What A	All Students Should Know	What All Students Should be Able to Do	Learning Activities
	of 5 th grade, the student will: ty to a pictorial symbol on a lule.	By the end of 5 th grade, the student will: Goal 1 F-6 Recognize and interpret and make use of patterns and relationships in daily living.	TEACH Manual: Volume I, Fall-Apple Factors, Candy Math, Spinning For Value Volume II, American Cowboy Volume III, F-10, F-23, K-8 Computer Assisted Instruction: Millie's Math House® Kid Pix Studio® Assistive Technology: Touch Window® IntelliKeys® Switch KE:NX®



Grades 6-8	Mathematics	integers, fractions) geometry, and number theory (including primes, factors, multiples). Alternate Framework Standard: FM-5 Using the relationships between whole numbers, fractions, and shapes to understand real-life concepts. Graduate Goal 3: All graduates will express personal feelings and self-advocate for immediate needs. Graduate Goal 4: All graduates will use direct observation or personal experience to solve a problem or complete a task. Graduate Goal 5: All graduates will follow an object, picture, symbol, or a written routine.	
What A	All Students Should Know	What All Students Should be Able to Do	Learning Activities
Demonstrate a	8 th grade, the student will: a comprehension of the etween time and a liked activity or	By the end of 8th grade, the student will: Goal 1 F-8 Participate in activities involving organizing information into useful forms. Goal 3 F-3 Apply strategies developed through personal experience to solve a problem or complete a task. Goal 3 F-8 Make connections between an action and its consequences.	TEACH Manual: Volume I, Pumpkin Carving, Apple Fractions, All About Winter, Leaf Rainbow Volume III, F-13, F-15, F-20 Computer Assisted Instruction: Think'n Things® Assistive Technology: Touch Window® IntelliKeys® Switch KE:NX®



Grades 9-12	Mathematics	 Show-Me Standard: M5 Mathematical systems (including real numbers, whole numbers, integers, fractions) geometry, and number theory (including primes, factors, multiples). Alternate Framework Standard: FM-5 Using the relationships between whole numbers, fractions, and shapes to understand real-life concepts. Graduate Goal 3: All graduates will express personal feelings and self-advocate for immediate needs. Graduate Goal 4: All graduates will use direct observation or personal experience to solve a problem or complete a task. Graduate Goal 5: All graduates will follow an object, picture, symbol, or a written routine. 	
What All	Students Should Know	What All Students Should be Able to Do	Learning Activities
Demonstrate a continuous between time an	2 th grade, the student will: comprehension the relationship nd a disliked activity. nake a simple purchase.	By the end of 12th grade, the student will: Goal 1 F-10 Generalize acquired skills across environments. Goal 3 F-8 Make connections between an action and its consequences.	TEACH Manual: Volume I, Patriotic Fruit, Measuring, Fudge Sickles Mix Volume II, Time for Safety Volume III, F-38, F-40 Computer Assisted Instruction: IntelliPics® Assistive Technology: Touch Window® IntelliKeys® Switch KE:NX®



Grades K-5	Mathematics	solve problem so	comparison, sequencing, counting and classifying to ms related to daily living.
What All	Students Should Know	What All Students Should be Able to Do	Learning Activities
	he 5 th grade, the student will: s by physical attributes.	By the end of the 5th grade, the student will: Goal 1 F-7 Differentiate between correct and incorrect information. Goal 1 F-10 Generalize acquired skills across environments. Goal 3 F-2 Apply strategies developed through instruction or observation to solve a problem or complete a task.	TEACH Manual: Volume I, Where Does It Go, To Eat or Not To Eat Volume II, What Did Cowboys Eat Volume III, C-1, C-9, F-13, G-5 Computer Assisted Instruction: Millie's Math House® Think'n Things® Assistive Technology: Touch Window® IntelliKeys® Switch KE:NX®



Grades 6-8

Mathematics

Show-Me Standard: M6 Discrete mathematics (such as graph theory, counting techniques, matrices).

<u>Alternate Framework Standard</u>: FM-6 Using comparison, sequencing, counting and classifying to solve problems related to daily living.

Graduate Goal 2: All graduates will indicate a choice when given two or more options.

Graduate Goal 4: All graduates will use direct observation or personal experience to solve a problem or complete a task.

What All Students Should Know	What All Students Should be Able to Do	Learning Activities
By the end of 8 th grade, the student will: Select correct instrument to measure items. Use simple classification systems (size, etc.). Use basic comparisons (weight, size, price, etc.). Have knowledge of counting.	By the end of 8 th grade, the student will: Goal 3 F-7 Select an appropriate strategy to address a problem or complete a task.	TEACH Manual: Volume I, Measuring Volume III, C-1, C-13, D-5, G-8, K-12 Computer Assisted Instruction: Think n' Things® Kid Pix Studio® Assistive Technology: Touch Window® IntelliKeys® Switch KE:NX®



Grades 9-12	Mathematics	Matrices). Alternate Framework Standard: FM-6 Using comparison, sequencing, counting and classifying to solve problems related to daily living. Graduate Goal 2: All graduates will indicate a choice when given two or more options. Graduate Goal 4: All graduates will use direct observation or personal experience to solve a problem or complete a task.	
What Al	l Students Should Know	What All Students Should be Able to Do	Learning Activities
Gather items ractivity.	12 th grade, the student will: needed to complete task or nce to complete task or an	By the end of 12th grade, the student will: Goal 1 F-8 Participate in activities involving organizing information into useful forms. Goal 3 F-7 Select an appropriate strategy to address a problem or complete a task.	TEACH Manual: Volume I, In My House Volume III, B-13, C-1, C-11 Computer Assisted Instruction: Think'n Things II® IntelliPics® Assistive Technology: Touch Window® IntelliKeys® Switch KE:NX®

